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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,896	02/04/2004	Jason Evan Schleifer	50037.206US01	3894

27488 7590 02/05/2008

MERCHANT & GOULD (MICROSOFT)
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER	
FATEHI, PARHAM R	
ART UNIT	**PAPER NUMBER**
2194	

MAIL DATE	DELIVERY MODE
02/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/771,896	SCHLEIFER ET AL.	
	Examiner	Art Unit	
	Parham (Paul) R. Fatehi	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's Request for Continued Examination was entered on 10/31/2007. Examiner has performed further search and new art is cited in this Action. Claims 1-22 are pending in this application.

Claim Objections

2. Claim 10 is objected to because of the following informalities: claim 10, ln 21 recites "the two items are not be considered duplicates of one another" and has awkward wording. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swierk et Al., "The Roma Personal Metadata Service." Mobile Networks and Applications; 7, 2002; pgs. 407-418 [hereafter Swierk] in view of Masek (US 2005/0165884) and further in view of Roberts el Al (US 2005/0073991) [hereafter Roberts].

5. As per Claim 1, Swierk discloses a method for synchronizing a device with data sources and allowing cross-pollination of the data sources (Page 408, Par. 5-7 & Page 409, Par. 5, Figure 1, the system can be used for synchronization and transfer of data between sources for synchronization or version management purposes); creating a first data source and a second data source (Page 408, Par. 5-7 & Page 409, Par. 5, as in Figure 1, a device can create two data sources such as a desktop and a laptop); connecting the device to a first data source (Page 408, Par. 5-7 & Page 409, Par. 5, as in Figure 1, the device can connect to a first data source such as a desktop); synchronizing the device with the first source (Page 408, Par. 5-7 & Page 409, Par. 5, Figure 1, the device can synchronize with the first source); connecting the device to a second source (Page 408, Par. 5-7 & Page 409, Par. 5, as in Figure 1, a device can connect to a second source such as a laptop); and synchronizing the device with the second source, wherein the device may be used to cross-pollinate between the first data source and the second data source (Page 408, Par. 5-7 & Page 409, Par. 5, as in Figure 1, system allows for synchronization and cross-pollination between device and first and second sources).

6. Swierk fails to explicitly disclose determining items to synchronize between the first data source, the second data source and the device, such that the device and the first source each include a same version of the items after synchronizing and such that the first data source, the second data source and the device each include the same version of the items after synchronizing and cross-pollinating.

7. Whereas, Masek teaches synchronizing a file between all of the different devices, including mobile devices in order to increase the efficiency of a system by allowing updates at one location to be reflected at another location, thereby replicating versions across all system devices. One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk to include the method of multiple device synchronization and cross-pollination as taught by Masek in order to make the version management of software systems more efficient and to save time for users of multiple devices.

8. The teachings of Swierk as modified by Masek do not explicitly disclose the first data source, the second data source and the device are user devices that are associated with a particular user. Whereas, Roberts teaches a synchronization management device that acts as an interconnect between two other personal devices used for synchronization purposes (Roberts, Par. 2, ln. 8-10 & par. 5 & par. 7, ln. 1-6). One having ordinary skill in the art, at the time the invention was made, would have modified the teachings of Swierk as modified by Masek to include the synchronizing agent as a distinct personal device amongst all the personal devices in the system in order to enable synchronization between a user's multiple devices when the user owns more than two devices.

9. As per Claim 17, Swierk discloses A system for cross-pollinating data sources (Page 408, Par. 5-7 & Page 409, Par. 5, as in Figure 1, system allows for synchronizing, version management, file distribution, and cross-pollination between device and a plurality of data sources such as laptop, desktop, kiosk, etc.); At least two data sources that may cross-pollinate each other (Page 408, Par. 5-7 & Page 409, Par. 5, as in Figure 1, system allows for synchronizing, version management, file distribution, and cross-pollination between device and a plurality of data sources such as laptop, desktop, kiosk, etc.); A device that is configured to act a shuttle between the at least two data sources to cross-pollinate, and that is configured to synchronize with the at least two data sources (Page 408, Par. 5-7 & Page 409, Par. 5, as in Figure 1, system allows for synchronizing, version management, file distribution, and cross-pollination between device and a plurality of data sources such as laptop, desktop, kiosk, etc and acts as a shuttle between the devices).

10. Swierk fails to explicitly disclose such that after synchronizing and cross-pollinating, the device and the at least two data sources a same version of items that were selected to be synchronized.

11. Whereas, Masek teaches synchronizing a file between all of the different devices, including mobile devices in order to increase the efficiency of a system by allowing updates at one location to be reflected at another location, thereby replicating versions across all system devices. One of ordinary skill in the art at the time the

invention was made would have modified the teachings of Swierk to include the method of multiple device synchronization and cross-pollination as taught by Masek in order to make the version management of software systems more efficient and to save time for users of multiple devices.

12. The teachings of Swierk as modified by Masek do not explicitly disclose the data sources and the device are user devices that are associated with a particular user. Whereas, Roberts teaches a synchronization management device that acts as an interconnect between two other personal devices used for synchronization purposes (Roberts, Par. 2, ln. 8-10 & par. 5 & par. 7, ln. 1-6). One having ordinary skill in the art, at the time the invention was made, would have modified the teachings of Swierk as modified by Masek to include the synchronizing agent as a distinct personal device amongst all the personal devices in the system in order to enable synchronization between a user's multiple devices when the user owns more than two devices.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swierk et Al., "The Roma Personal Metadata Service." Mobile Networks and Applications; 7, 2002; pgs. 407-418 [hereafter Swierk] in view of Masek (US 20050165884), further in view of Roberts el Al (US 2005/0073991) [hereafter Roberts] and further in view of Michener (US 2002/0198848).

14. As per Claim 10, the teachings of Swierk as modified by Masek, and further modified by Roberts substantially disclose the invention as claimed but do not further disclose determining the first items to synchronize and determining the second items to synchronize include examining a SyncHash value that is calculated for each of the items and is stored with each of the items; wherein the SyncHash value that is calculated for each item includes two levels of property level matching when the SyncHash value is calculated consisting of a primary keyset that is a set of fields that is defined as the primary properties that are compared to consider when an item is a duplicate and a secondary keyset that is a larger set of fields that is used to check for an existence of data in those properties that even if the primary keysets match between two items, the two items are not be considered duplicates of one another.

15. Moreover, Michener teaches use of multiple keysets to examine hash values to verify transactions in a transaction processing computer system. One having ordinary skill in the art, at the time the invention was made, would have further modified the teachings of Swierk in view of Masek, and further in view of Roberts, to include hash keysets as taught by Michener in order to efficiently verify that system commands are being processed without duplication.

16. Claims 2-9 & 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swierk in view Masek, further in view of Roberts and further in view of Peng (US Patent 6,317,754).

17. As per Claim 2, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose performing a duplicate detection check to determine when an item has been synchronized.

18. Whereas Peng discloses a duplicate detection check occurs in the synchronization process to determine if updating is necessary (col. 3, ln. 65 – 67). One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk in view Masek to include the method of utilizing a duplicate detection check as taught by Peng in order to avoid unnecessarily copying data that is already synchronized and unnecessarily utilizing processing time for copying the data.

19. As per Claim 3, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose duplicate detection check further comprises performing a property comparison.

20. Whereas, Peng discloses a detection check that consists of a comparison of versions and properties (col. 6, ln. 7 - 10). One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk in view of Masek to include the method of property comparison as taught by Peng in order to provide increase efficiency by using a methodological system by which the system can deem whether an update/copy is or is not necessary.

21. As per Claim 4, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose performing the duplicate detection check further comprises calculating a sync hash value.

22. Whereas, Peng discloses identifiers/properties that the comparisons are run on can be assigned to the hash codes which are generated by a one-way hash function (col. 13, ln. 64 – 67). One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk in view of Masek to include the method of incorporating the values in the conventional manner as taught by Peng in order to easily and efficiently manage and reference objects or data in the synchronization system.

23. As per Claim 5, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose updating the item when the item has already been synchronized.

24. Whereas, Peng discloses the unit of transmitted data may be a differential update. This is distinguished from the prior art systems which must transmit the whole item as the unit of transmitted data (Col 4, ln. 2 – 6).

25. One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk in view of Masek to include the method of updating the

item when the item has already been synchronized as taught by Peng in order to speed up the synchronizing process and not waste processing power or time.

26. As per Claim 6, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose receiving a delete command and performing the delete command, wherein the delete command is selected from a soft delete and a hard delete.

27. Whereas, Peng discloses propagated deletes and local deletes (col. 5, ln. 18 – 24). One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk in view of Masek to include the method of using a soft delete command and a hard delete command in order to increase functionality of a synchronization system in order to present the user with an option of synchronizing deletes with devices or to delete locally while allowing specific data to be synchronized/updated/copied to specific connected devices.

28. As per Claim 7, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose restricting cross-pollination between data sources.

29. Whereas, Peng discloses may or may not (restricting) allow synchronization between the servers (see Abstract). One of ordinary skill in the art at the time the

invention was made would have modified the teachings of Swierk in view of Masek to include the method of using a switch that enables restricting of cross-pollination between data sources in order to have an option of not allowing all devices to mirror each other and instead having certain data exist on a certain device and other specific data to exist on the other device (i.e. A children's PC should have children's games while the Home PC should have all the word processing data).

30. As per Claim 8, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose wherein creating the first data source and the second data source further comprises indicating a data source type and storing an identifier associated with each of the first data source and second data source.

31. Whereas, Peng discloses all sources have identifiers and types (see col. 3, line 18 – 20). One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk in view of Masek to include the method of indicating a data source type and stored an identifier in order to track the data that should be specific to each data source.

32. As per Claim 9, the system of Swierk in view of Masek substantially teaches the invention as claimed but fails to disclose synchronizing the device with the first data source may use a first synchronization protocol and synchronizing the device with the second protocol may use a second synchronization protocol.

33. Whereas, Peng discloses each of the synchronizers users a different type of communications transport and protocol (Col. 14, ln. 3 – 9). One of ordinary skill in the art at the time the invention was made would have modified the teachings of Swierk in view of Masek to include the method of using a different type of synchronization protocol for each data source in order to suit the system with versatility in data transmissions.

34. As per Claim 18, it is a system claim with the same limitations as the method claim 11 and is therefore rejected under the same reasons.

35. As per Claim 19, it is a system claim with the same limitations as the method claim 4 and is therefore rejected under the same reasons.

36. As per Claim 20, it is a system claims with the same limitations as the method claim 6 and is rejected under the same reasons.

37. As per Claims 21, is a system claim with the same limitations as the method claim 7 and is rejected under the same reasons.

38. As per Claim 22, it is a system claim with the same limitations as the method claim 9 and is therefore rejected under the same reasons.

39. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swierk in view Masek, further in view of Roberts, further in view of Michener, and further in view of Peng.

40. As per Claim 11, it is a system claim with same limitations as method claim 2 and is rejected under the same reasons.

41. As per Claim 12, it is a system claim with same limitations as method claim 3 and is rejected under the same reasons.

42. As per claim 13, the Peng teaches receiving a delete command and performing the delete command, wherein the delete command is selected from a soft delete and a hard delete; Wherein the hard delete physically deletes the item and wherein the hard delete propagates across each of the data sources and the device such that the item is removed from the device, the first data source and the second data source;

43. Wherein a soft delete is an item that has gone out of filter, wherein the soft delete removes the item from the device and one of the data sources but does not remove the item from the other one of the data sources (Peng, col. 5, ln. 18 – 24).

44. As per Claims 14, is a system claim with the same limitations as the method claim 7 and is rejected under the same reasons.

45. As per Claim 15, it is a system claim with the same limitations as the method claim 8 and is therefore rejected under the same reasons.

46. As per Claim 16, it is a system claim with the same limitations as the method claim 9 and is therefore rejected under the same reasons.

Response to Arguments

47. Applicant's arguments with respect to claims 1, 10 & 17 have been considered but are moot in view of the new ground(s) of rejection.

48. Applicant substantially argued:

(a) As per claims 1, 10 & 17, the cited references do not teach using a user device to synchronize and cross-pollinate devices that are also user devices.

(b) As per claim 10, it has been amended to include a primary keyset and a secondary keyset that is not described by prior art.

(c) Claim 17, as amended to include "a device that is configured to act as a shuttle between the at least two data sources to cross-pollinate..." is proposed to be allowable.

49. Examiner respectfully argues:

(A) Examiner has performed another search and found prior art that makes a more explicit disclosure of a user device that is used to synchronize or "cross-pollinate" devices that are also user devices. Please see Roberts et Al (US 2005/0073991).

(B) Please refer to the rejection of claim 10 above, where the Michener reference (US 2002/0198848) discloses the use of hash keysets.

(C) The Roberts et Al reference teaches a customizable synchronization management system on a personal computing device that can act as a shuttle between multiple data sources.

Conclusion

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parham (Paul) R. Fatehi whose telephone number is 571-270-1407. The examiner can normally be reached on M-Th 9:30AM-8PM EST, off Fridays.

51. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571)272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

52. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Fatehi
AU 2194

Fatehi
01/30/08

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER